UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 2 290 BROADWAY NEW YORK, NEW YORK 10007-1866

April 7, 2006

BY ELECTRONIC MAIL AND REGULAR MAIL

Mr. Benn Lewis Vice President Airtek Environmental Corp. 39 W. 38th St. 12th Floor New York, N.Y. 10018

Dear Mr. Lewis:

The United States Environmental Protection Agency (EPA) has reviewed the draft submittal package of six documents, dated January 10, 2006, for the "remediation and deconstruction" of Fiterman Hall at 30 West Broadway in the Borough of Manhattan, New York. EPA has also consulted with the U.S. Department of Labor Occupational Safety and Health Administration (OSHA), New York State Department of Environmental Conservation (NYSDEC), New York State Department of Labor (NYSDOL), the New York City Department of Environmental Protection (NYCDEP), and others, about the January 10, 2006 draft for the "remediation and deconstruction" of Fiterman Hall. The regulators' comments are incorporated in the attached comments.

Fiterman Hall was physically damaged by the collapse of 7 World Trade Center, and impacted by the environmental effects of the World Trade Center collapse. As a result, safeguards for the prevention of releases into the environment of hazardous substances and contaminants during the abatement and deconstruction process must be employed to prevent a situation that may present a potential imminent and substantial endangerment to public health and the environment. EPA's principal objective in assessing the plans for "remediation and deconstruction" of Fiterman Hall is to identify instances where safeguards against such potential releases must be added or strengthened.

The draft "remediation and deconstruction" documents were submitted by letter of January 12, 2006 by Airtek Environmental Corp. (Airtek) on behalf of the Dormitory Authority of the State of New York (DASNY) and the City University of New York (CUNY). The following documents were reviewed by the regulators:

- Preliminary Façade Characterization Report
- Preliminary Environmental Characterization Report

- · Regulatory Submittal Part I Work Plan
- Regulatory Submittal Part II Environmental Community Air Monitoring Program
- Regulatory Submittal Part III Health & Safety Plan
- Regulatory Submittal Part IV Waste Sampling and Management Plan

The draft submittal package states that various other plans will be submitted at a later date by the contractor(s) awarded the contract(s) for this project. The regulators reserve the right to modify the attached comments and/or make additional comments about the proposed work if new information becomes available or information, currently known and considered, is changed in whole or in part during the "remediation and deconstruction" project. The attached comments do not pertain to any matters not addressed in the documents reviewed. In the event that the plans for the "remediation and deconstruction" have to be supplemented as the project proceeds, the regulators will review and may provide additional comments after we review the supplementary information and documents submitted by DASNY/CUNY.

To explain the revisions to the draft submittal package for the "remediation and deconstruction" of Fiterman Hall, EPA requests that DASNY/CUNY provide the regulators with a separate response to each of the attached comments that states: (1) whether the comments have been incorporated into the revised draft submittal package; (2) if a comment has not been incorporated, the reason it was not incorporated; and, (3) any additional information to address DASNY/CUNY's response to the attached comments. The supplement will facilitate the regulators' review process. Kindly let us know DASNY/CUNY's schedule for submitting the revised draft submittal package for the "remediation and deconstruction" of Fiterman Hall and the other deliverables referenced in this letter.

After DASNY/CUNY and its consultants have an opportunity to review the regulators' comments and this letter, please let me know if you would like to discuss them during a teleconference or at a meeting. We look forward to your response to our comments prior to your commencement of work.

If you have any questions please contact Mr. Emmet Keveney of my staff at (212) 637-3459.

Sincerely,

Pat Evangelista

WTC Coordinator

New York City Response and Recovery Operations

Enclosure

cc: Sal Carlomagno, NYSDEC w/encl.
Chris Alonge, NYSDOL w/encl.
Krish Radhakrishnan, NYCDEP w/encl.
Richard Mendelson, OSHA w/encl.
Robert Iulo, NYCDOB w/encl.
Richard Dalessio, DASNY w/encl.
Max Pizer, CUNY w/encl.

Preliminary Environmental Characterization Report Current Conditions at Fiterman Hall 30 West Broadway New York, New York Dated January 10, 2006

Sections 1.0 Executive Summary - Exterior Façade & 5.3 Exterior Dust Investigation

1. This section states that cleaning of the lower two floors where urban background road dust has accumulated will be conducted, and focused cleaning of limited façade components that exhibit residual dust will be conducted as a part of the remediation/deconstruction project. This statement appears to contradict the January 10, 2006 Preliminary Façade Characterization Report. The façade report states that only portions of the second floor would be cleaned, that the gash area would be cleaned, and it does not mention any "focused cleaning of limited façade components". Please clarify exactly what portions/areas of the exterior of the building will be subject to cleaning and ensure that the language in all of the plans/reports is consistent.

Sections 1.0 Executive Summary - Lead-Based Paint & 5.5 Lead-Based Paint Survey

2. This section states that lead-painted materials remain in the facility. Details should be provided on how these materials will be abated and removed during the project.

Section 1.0 Executive Summary - Microbiological Contamination

3. This section states that limited visible mold exists in the building. How does Airtek plan to deal with the mold for this project? The plan does not provide any information on the manner in which mold and bacterial contamination will be addressed. Such information should be included.

Section 5.4 Asbestos Containing Materials Survey

4. This section discusses window caulk on stair bulkhead windows. It is unclear if this category of caulking will be included in the PCB sampling discussed in Section 4.5 of Part IV. Please clarify.

Preliminary Façade Characterization Report Remediation and Deconstruction of Fiterman Hall, 30 West Broadway, New York, New York Dated January 10, 2006

General Comment:

1. The Work Plan, and the Environmental and Facade Characterization Reports have not indicated whether contaminants are present on the building roof. Please clarify. This information is needed to determine the adequacy of proposed air sampling locations in relation to any abatement work that may be needed on the rooftop and/or during exterior abatement activities.

Section 2.3 Façade Visual Inspection

2. This section states that a floor-by-floor, façade-by-façade inspection was conducted by an investigation team that included "USEPA Lead Inspectors". Please clarify what is meant by "USEPA Lead Inspectors". EPA personnel were not part of any "floor-by-floor, façade-by-façade inspection" conducted by the owners of the building.

Section 2.6 WTC COPC Impact Investigation Contaminants of Potential Concern

3. This section makes reference to the following document, World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks (May 2003). Since Airtek has made reference to this document it should be clarified in this section that the COPCs noted in the referenced document were asbestos, MMVF, silica, dioxin, PAH, and lead. Please revise this section.

Section 3.3 Façade Visual Inspection – Debris

- 4. This section states that very little debris exists on the façade of the lower floors and that isolated locations where debris remains have been identified for focused cleaning including the gash area, specified areas of the second floor, and the entire first floor façade.
 - (a) Please clarify exactly what portions of the second floor will be subject to a focused cleaning after a thorough visual inspection is conducted of the entire façade of the building.
 - (b) Please clarify why it is limited to the second floor and below if the section states that debris exists on the façade of the lower floors. What remains and exactly where on what floors?

Section 3.6 WTC COPC Impact Inspection – Surface Impact

5. This section states that the highest level of lead dust detected above the ground floor was 8.18 ug/ft. This statement does not seem to be consistent with the sample results attached to the Preliminary Façade Characterization Report. The attachments state that the façade above the 5th floor had a lead sample result of 10.7 ug/ft² and the façade above the 14th floor had lead sample results of 71.6 ug/ft² and 136 ug/ft². Please clarify.

Section 4.1 WTC Dust Impact - Exterior Cleaning Requirements

- 6. This section states that portions of the second floor must be subject to focused cleaning. Please clarify exactly what portions of the second floor will be subject to a focused cleaning after a thorough visual inspection is conducted of the entire façade of the building. Details on how these areas will be cleaned should be provided.
- 7. This section states that the focused cleaning will allow the erection of the project exterior scaffold to be delayed until the scaffold is needed for deconstruction work. It is unclear what Airtek is implying with this sentence. Please revise the section to provide clarity.

Section 4.2 Façade Integrity

8. This section states that the window systems are in excellent condition and are a serviceable barrier for use during the abatement. This section further states that the installation of plywood/plastic critical barriers over the windows is not necessary to carry out the remediation of the building. Please confirm if there are any breached windows towards the southern end of the building. Airtek should ensure that if there are any breaches/openings in any of the windows or an opening exists in the façade that critical barriers are properly installed prior to the commencement of any interior abatement work.

Section 4.3 WTC Dust Impact – Façade Components

- 9. This section states that build-up of urban road dust on the ground floor and isolated pockets of WTC debris will be subject to focused cleaning. Please provide specific details on exactly what areas of the building's façade will be cleaned.
- 10. This section states the following, "The gash area will be cleaned from the slabs themselves." Please provide clarity on this statement and the approach to be taken for the gash area since the gash area consists of other elements besides slabs that will need to be cleaned (e.g., steel beams, current netting, etc.). Please clarify in detail what is being defined as the "gash area."

Regulatory Submittal Part I - Work Plan Remediation and Deconstruction of Fiterman Hall – 30 West Broadway New York, New York Dated January 10, 2006

General Comments

- 1. Reference is made to various plans that will be submitted at a later date by the contractor(s) awarded the contract(s) for this project. It would be beneficial for the owner to provide the regulators with as much detail as possible on all aspects of the project at this stage of the process, as opposed to a later date, to minimize any delays on the initiation of the project since the regulators will need additional time to review any supplemental information provided. EPA reserves its right to comment on the se subsequent documents and reserves its right to make additional comments on the preliminary documents dated January 10, 2006 submitted by Airtek for the owner.
- 2. It is recommended that an Asbestos and COPC Abatement Plan be developed for this project. Information including, but not limited to, the installation of exterior hoist(s) or crane(s), the installation of scaffolding and tie-ins, the movement of containers within the building to and from storage areas and/or loading areas, and the types of containers/bags, etc. to be used to transport waste streams from the containment areas should be provided.
- 3. The "Deconstruction Phase" is not defined in Part I. There is a Section titled, "Conventional Building Demolition." If this is considered the "Deconstruction Phase" all submissions referencing both terms should be revised to provide clarity.
- 4. Under what phase will the scaffolding and netting occur. Details should be provided.

Section 2.4 Regulatory Submittal Part III – Preliminary Health & Safety Plan

5. This section states that a preliminary Health and Safety Plan (HASP) is included as Part III of the submittal package and that the contractor awarded the contract for the project will finalize the HASP. Airtek should provide specific details on what additional information will need to be incorporated into the final HASP that is not already in the preliminary HASP.

Section 3.3 NYS DOL Variance Applications

6. Reference is made to a 'Contractor's work plan'. What will this work plan entail and when will it be submitted?

Section 4.5 Elevator Service

7. This section discusses Airtek's *Re-opening Request for Variance 05-0919, 11/14/05*. Please be cognizant that EPA and DOL have already provided comments on the re-

opening request. Revisions should be made to this section based on the initial comments provided on the re-opening request.

Section 5.2 Work Area Monitoring

- 8. What is Airtek defining as "project monitoring"?
- 9. This section states that project monitoring and asbestos air sampling will be conducted throughout the Remediation Phase of the Project. Community air monitoring needs to be conducted for all phases of the project: the remediation phase, the deconstruction phase, and the installation of scaffolding and any netting. Part I should be revised for clarity.

Section 6.1 Operation I – Clean Zone Decontamination & Clearance

10. The figures attached to Part I do not indicate where the three zones (Clean Zone 1, 2, and 3) are designated. Please clarify.

Section 6.6 Operation VI – Work Area Clearance

- 11. This section states that the site will be considered ready for the "conventional Deconstruction Phase" after interior air clearance sampling. A "conventional Deconstruction Phase" is not defined. Please provide clarity.
- 12. This section states that a detailed work area clearance protocol will be developed in conjunction with the final Work Plan to be submitted by the Contractor. Airtek should provide specific details on what additional information will need to be incorporated into the final work area clearance protocol that is not already specified in Part I. What will the "final Work Plan" entail and when will it be submitted.

Section 7.1 Permits

13. This section states that the contractor will obtain MTA and LMCCC approvals of the deconstruction plan. What is the timeframe for submitting the deconstruction plan to the MTA and LMCCC for comment and review? If comments provided by the MTA and/or LMCCC will impact the engineering controls specified in the plans to ensure that safeguards for the prevention of releases into the environment of hazardous substances and contaminants are employed, the regulators will need another opportunity to review the plans modified to incorporate their comments before the commencement of work.

Section 7.3 Scaffolding

14. Reference is made to a structural engineer's *Deconstruction and Scaffold Layout Plan*. This plan was not submitted. Please provide details.

Section 7.5 Demolition Sequence

- 15. This section gives the impression that elevators and utility areas will be handled after the remediation phase. How can contaminated elevator shafts and utility areas be properly cleaned and their respective areas cleared if Airtek proposes to conduct these activities after the removal of containment and critical barriers?
- 16. This section states that the contractor will deconstruct the building in the sequence described in their work plan. Information on the sequencing of the work should be provided to understand the steps to be taken.
- 17. This section states that as each floor is deconstructed, material will be pushed down abandoned shafts and dropped to the cellar level. No information is provided on what shafts, on what floors, or what materials are planned to be dropped in these shafts and how using such a method to transport materials to the ground level will be properly controlled. Details must be provided.

Section 7.6 Waste Management – Conventional Demolition

18. The following sentence found in this section should be re-written to read as follows: "Based on the results of RCRA characteristic testing, the waste will be characterized according to any exceedances of RCRA parameters."

Section 7.7 Site Work

- 19. This section discusses removing rubble in the cellar. It is not clear if this pertains to rubble currently to be found in the cellar. If so, it would need to be handled properly under containment during the remediation phase.
- 20. This section states that the cellar concrete slab is to be left broom clean. No detail is provided on if, and how, the concrete slab will be cleaned during the remediation phase to remove any potential dust that currently sits on the surface of the concrete slab. More details should be provided.

Attachment I: Variance Applications

21. This attachment simply states that regulatory variance requests are to be determined by final contractor scope. This relevant information needs to be provided to fully understand how the waste streams will be handled for this project.

Attachment II: Logistics Plans

22. Many of the figures/drawings in the attachments are difficult to read. Consequently, not all of the information noted on the figures/drawings is legible, and complete comments cannot be provided at this time due to this problem. Please submit clear and easy-to-read figures/drawings for review and comment.

- 23. More specific details on how/where waste streams will be stored in the "storage area" as shown on the figure should be provided.
- 24. How does this figure correlate with Figure WS-1 in Part IV (Waste Sampling and Management Plan)? Please clarify.
- 25. Section 6.0 (Waste Packaging and Storage) of Part IV (Waste Sampling and Management Plan) states that the locked waste storage areas will be established in the southeast corner of the first floor of the building. The figure in Attachment II seems to show that the storage area will be located in the northwest corner of the building. It also seems to conflict with the figure shown in Attachment III. Please clarify.

Attachment III: Remediation Phasing Plan 1-A

26. It is unclear from the figure how waste will be transported from the storage area to the loading docks. Please clarify.

Regulatory Submittal Part II – Environmental Community Air Monitoring Program Remediation and Deconstruction of Fiterman Hall – 30 West Broadway New York, NY Dated January 10, 2006

Section 1.1 Operations to Be Monitored

- 1. This section states that the project includes "scaffold erection, six months of gut-strip contaminants of potential concern (CoPC) abatement and removal, asbestos abatement and removal under a variance from the NYS DOL, and five months of conventional deconstruction." Please clarify if the scaffold erection is considered to be part of the "remediation phase" referenced later in the section with regards to the implementation of the community air monitoring program. The community air monitoring program should be in-place prior to the commencement of the scaffold erection. This section should be revised to indicate this fact.
- 2. What does the "remediation phase" and the "deconstruction phase" of the project encompass that is referenced in this section?

Section 2.3 Notification:

- 3. "NYCDOL" should be "NYSDOL".
- 4. For clarity, it is recommended that these sections be re-written to indicate that EPA, NYCDEP, and NYSDOL will be notified of any exceedance.

Section 3.2 Community Air Monitoring

- 5. This section states that community monitoring locations will be determined in cooperation with the USEPA, and will be identified on a drawing to be included in Attachment C (Monitoring Locations) to this specification. The January 10, 2006 version of this plan already includes a drawing. This drawing and Table 1 (Community Air Monitoring) will need to be revised after a discussion occurs with the regulatory agencies on the location of, and number of, air monitoring stations.
- 6. This section states that background community air monitoring will be conducted as detailed in $Table\ 1$ $Community\ Air\ Monitoring$ in Attachment A. Table 1 discusses real-time monitoring of gaseous mercury using a portable lumex instrument and visible dust emissions observations. Please clarify if gaseous mercury and visible dust emissions will be conducted during the background community air monitoring.

Section 4.2 Community Air Monitoring

7. This section states that initial community air monitoring locations are identified on the drawing included in Attachment A (Community Monitoring). The proper reference should be Attachment C (Community Monitoring Locations).

Sections 5.2 EPA Site Specific Trigger Levels & 5.3 Notification

8. These sections state that notification will be made to the USEPA Region 2 office and the NYCDEP and that work will be reinitiated once the USEPA Region 2 office has agreed (and NYS DOL during the Abatement Phase in the case of asbestos exceedances). For clarity, it is recommended that these sections be re-written to indicate that EPA, NYCDEP, and NYSDOL will be notified of any exceedance.

Sections 5.2 EPA Site Specific Trigger Levels

9. Strike-out the following language from this section, "associated with the exceedance."

Section 5.3 Notification

- 10. It is recommended that the following *bold italic* language be added to the first sentence of this section: "The US EPA Region 2 office, NYS DOL and the NYCDEP will be notified promptly *via phone and electronic mail* of any exceedance of either a Target Air Quality Level or an EPA Site Specific Trigger Level and..."
- 11. It is recommended that the following language be added to this section: "In the event that an exceedance of a USEPA Site Specific Trigger Level occurs, DASNY/CUNY shall prepare an Exceedance Summary Report, following completion of the exceedance assessment, for submission to the USEPA (and NYSDOL for asbestos exceedances only). This will be a 1-2 page report stating nature of the exceedance, causes of the exceedance and corrective actions taken if it was determined to be associated with 30 West Broadway."
- 12. DASNY/CUNY should be cognizant that nearby construction activities should be well documented since such activities may potentially result in project monitoring exceedances. Documentation of off-site activities may potentially avoid unnecessary stop-work delays if the exceedance assessment determines that other potential sources may have caused the exceedance. It is recommended that the site hygienist or a qualified designee fully document nearby construction activities in a daily site log.

Section 5.4 Monitoring Data

13. This section states that all sampling results collected pursuant to this specification, in suitable electronic form, will be promptly provided to the USEPA Region 2 office weekly and exceedances will be reported as provided above. The sampling results should also be

provided to the NYCDEP, NYSDEC and NYSDOL offices. This section should be rewritten to state this fact.

<u>Attachment A – Table 1 – Community Air Monitoring</u>

14. Once a QAPP is drafted, the information provided in the columns labeled, "Sample Collection Flow Rate and Duration" and "Analysis Method" in Table 1 should be consistent with the information provided in the QAPP to be submitted to the regulators for review and comment.

Notes on Community Air Monitoring Table: Dust

15. Bullet item #2 states that the sensitivity on TEM air samples will be less than "0.002 s/cc." The target air quality level for asbestos referenced in the plan is 0.0009 f/cc. How will Airtek meet the target air quality level if the sensitivity is at "0.002 f/cc"?

Notes on Community Air Monitoring Table: Dust

16. A heated inlet was not indicated for the Met One- E-BAMs. It is recommended that it be included to address condensable emissions.

Notes on Community Air Monitoring Table: Respirable Crystalline Silica – Metals

17. The notes for the metals state that mercury was one of the metals to be analyzed by ICP-MS. Table 1 (Community Air Monitoring) states that mercury will be analyzed by "EPA 324/1631". Please clarify. In addition, why is Method 1631 referenced?

Notes on Community Air Monitoring Table: Mercury

18. This section states that at a minimum, real-time mercury readings will be taken twice a shift at the fixed air monitoring locations. However, Table 1 (Community Air Monitoring) states that real-time mercury readings will be conducted by "3 site tours per work shift". Please clarify the discrepancy on how many times readings will be taken and please clarify what is meant by "3 site tours".

Notes on Community Air Monitoring Table: Organic Compounds (Dioxin/PCBs/PAHs)

19. It is recommended that the first and second sentences for bullet item #2 should be rewritten as follows: 'Organic samples will be collected at each community monitoring location once a week on a consecutive different day of the work week during the Abatement Phase and Deconstruction Phase, until all days of the work week are used and then the same schedule will be repeated until project completion. Samples from the air monitoring station with the highest 24-hour average PM_{10} concentration (ug/m3) recorded for that day will be submitted for analysis."

Attachment A - Table 2- Data Reference Levels for Community Monitoring

- 20. Recommend adding the following *bold* italic language to "Note 3" at the bottom of Table 2: "If a chromium value is in excess of the Target Air Quality Level (0.6 ug/m3), this will result in a stoppage of work; and, that sample will be speciated for chromium VI to determine that its concentration does not exceed the USEPA Site Specific Trigger Level for chromium VI (0.6 ug/m3), and the appropriate actions pertaining to an exceedance of the USEPA Site Specific Trigger Level *for chromium VI* will continue to be conducted."
- 21. Attachment D states that the QAPP is under development and will be finalized based upon the specifics of the regulators' comments on the proposed air plan. It is recommended that the QAPP follow a similar protocol as the QAPP that Airtek generated for the 133-135 Greenwich Street/21-23 Thames Street buildings.

Regulatory Submittal Part III

Health & Safety Plan

Remediation and Deconstruction of Fiterman Hall – 30 West Broadway New York, New York Dated January 10, 2006

General Comment

1. Parts I, II, and IV make reference to a "remediation phase" and a "deconstruction phase" while Part III (i.e., the Health and Safety Plan (HASP)) makes reference to these two phases and an additional phase, the "abatement phase." Please clarify how many phases are there for this project, what do each of them entail, and ensure that the same nomenclature is used in Parts I through IV for these phases.

Contacts/Emergency Telephone Numbers

- 2. It is recommended that local emergency telephone numbers (e.g., hospital(s), fire, police, etc.) be added to the list.
- 3. The correct spelling for the NYCDOB contact is "Iulo". Please revise the list.
- 4. A point of contact for NYSDEC and OSHA should be added to the list.
- 5. The list should be updated once the contractor is on-board.
- 6. The alternate Contractor Safety Officer should be added to the list as well.

Emergency Plan – Building Evacuation

- 7. This section states the following: "All personnel working in the potentially impacted areas shall be given the opportunity to read this section of the Health and Safety Plan (HASP). The remainder of the attached HASP will be implemented as conditions allow." Please clarify what Airtek is stating for this portion of the section.
- 8. It is unclear why items A through D pertain solely to a building evacuation. Please clarify.
- 9. It is recommended that a figure showing the designated assembly area and the route for personnel to get to it from the building be included.
- 10. More detail should be provided on the procedures to be taken before personnel are allowed to leave the designated assembly area and before re-entry is allowed into the building.

11. Details should be provided on how a building evacuation will be communicated to personnel within the building.

Section 1.0 Scope of Plan

- 12. Strike-out the second paragraph from this section.
- 13. Other portions of Airtek's submission indicated that the contractors would be generating their own HASPs. However, this section states that this HASP is for use by DASNY/CUNY and their designated contractors and consultants. Please clarify.

Section 4.3.2 Emergency Medical Treatment

14. The last bullet item of this section discusses evacuation routes. However, no figures showing the evacuation routes have been provided in the HASP. It is recommended that the evacuation route figures/maps be added to the HASP.

Section 4.3.3 Medical Response Equipment

15. Airtek should ensure that the HASP is amended to indicate the locations of the equipment stations once they have been determined by the CSO at the site.

<u>Figure 5.2 Fiterman Hall Remediation and Deconstruction Sample Subcontractor Site</u> Safety Plan

16. The title for this figure implies there is a subcontractor plan. Please clarify.

Section 7.3.1 Chemical Action Levels

17. This section states that Figure 7-1 lists the OSHA PEL, site specific Action Level, and trigger levels. Figure 7-1 does not show "trigger levels". Please clarify what is meant by this term and "site specific action level" in the HASP.

Section 8.1 Engineering Controls

18. Please clarify if torching activities will be conducted in the exclusion zone during the asbestos and COPCs abatement activities for the project. EPA understands that the city and state regulators would allow the use of torches in only limited circumstances during an asbestos abatement project. Clarity and specifications are needed on the use of torches, where will they be used, what type of torches, etc.

Section 16.0 Emergency Response

19. Please clarify in the HASP how the following unplanned events will be handled for the project: (1) unplanned, sudden, or non-sudden release of hazardous waste or constituents; and (2) falling or dropped building debris.

Section 16.3 Structural Failure

- 20. Please clarify if, and when, a building evacuation would occur due to a structural failure.
- 21. Please clarify if, and when, work stoppage would occur in a certain area due to a structural failure and what actions would be taken before work was allowed to be reinitiated in these areas.

Attachment 3 Worker Hygiene and Protection

22. Many of the items seem to be duplicated within the attachment. Please clarify.

Regulatory Submittal Part IV Waste Sampling and Management Plan Remediation and Deconstruction of Fiterman Hall 30 West Broadway New York, New York Dated January 10, 2006

Section 2.0

- 1. Airtek should indicate which of the anticipated waste streams described in this section are considered porous materials and which are considered non-porous materials. The waste sampling and management approach for the porous and non-porous materials should be clearly defined in Part IV.
- 2. Part IV should state that all porous materials will be disposed of as asbestos waste at a minimum and managed and disposed of according to the results of the waste classification sampling.
- 3. Part IV should discuss the waste sampling and management approach to be taken with the exterior mesh/netting currently on the building.
- 4. Part IV should discuss the waste sampling and management approach to be taken with any sprayed-on fireproofing, if it was used in the building.

Section 2.1

- 5. Remove "Regulated" from title of Section 2.1.
- 6. Only Section 2.1 mentions "lead-painted building materials." Part IV should discuss the waste sampling and management approach to be taken for this waste stream as was done for the other waste streams specified in Part IV.

Section 2.2

7. Wash-down water/liquids should be noted as a waste stream category in this section, and any other relevant section of Part IV. Part IV should describe how wash-down water/liquids will be collected, contained, characterized, stored, and disposed of depending on its sampling results.

Section 2.3

8. Part IV discusses two phases, a remediation phase and a deconstruction phase. Part IV states that the remediation phase of the project includes the removal of all interior surfaces and non-structural elements within the building, and the cleaning and encapsulation of all remaining structural elements under containment while the

deconstruction phase entails the deconstruction of the remaining cleaned and encapsulated structural concrete and steel components, and the steel and masonry façade. However, the materials specified under Section 2.3 titled "Deconstruction Waste" imply that these materials will be removed during the deconstruction phase. In fact, based on the definition of the two phases to be conducted for this project, these materials will be dealt with during the remediation phase. This section needs to be clarified or the title rewritten to clarify that these materials will be handled during the remediation phase, or alternatively, a distinction should be made about what materials will be handled under each phase.

- 9. It is recommended that either Section 2.3 or Section 2.6, and any appropriate subsequent sections of Part IV, include the proper handling and final disposal of lead-sheathed electrical wiring and mercury-containing electrical switches.
- 10. Elevators should be added to the list of deconstruction waste streams.

Section 2.5

- 11. It is recommended that the following *bold italic* language be added to the following sentence: "The category may include fluorescent lighting ballasts *and potting* material and caulking products."
- 12. It is recommended that the following language be added to this section: "If 50 ppm or more PCBs are detected in the waste stream the materials will be classified as both federal Toxic Substances Control Act (TSCA) waste and New York State hazardous waste."

Section 2.6

13. This section indicates that a variety of construction materials are cataloged in Attachment A (Building Contents Inventory & Chemical Log). Attachment A does not detail any construction materials, but only discusses chemicals found throughout the building. Construction materials (e.g., saws, drills, etc.) should be defined in Part IV and the waste sampling and management approach for this waste stream should be described in Part IV.

Section 2.8

14. This section states that the interior materials will have been decontaminated as part of the Remediation Phase. This implies that the interior materials will remain in the building at the end of the Remediation Phase and will be removed during the Deconstruction Phase. It is our understanding that all of the interior materials will be removed and disposed of properly during the Remediation Phase and only the structural shell will remain for the Deconstruction Phase. Please clarify.

15. Please clarify if the windows in the building are of the type that was manufactured with selenium as an ingredient to reduce solar heat.

Section 3.0

- 16. Strike-out "i.e., the Deconstruction Waste listed in subsection 2.3 above" in the first bullet item and replace with "e.g., the Deconstruction Waste listed in subsection 2.3, ACBMs noted in subsection 2.1, and miscellaneous contents noted in subsection 2.6."
- 17. Recommend replacing "deconstruction waste" with "waste material" in the second bullet item.
- 18. It is recommended that the following **bold italic** language be added to the third bullet item: "Where analytical results indicate that dust in a portion of the building is classified as a particular category of regulated waste, then dust-impacted materials in that portion of the building will be likewise classified **as that particular category of regulated waste** until and unless testing indicates otherwise.
- 19. The end of the third bullet item currently states: "...that dust-impacted materials in that portion of the building will be likewise classified until and unless testing indicates otherwise." Please clarify in this section whether an additional phase of sampling will be conducted and, if so, where the sampling scheme for this subsequent sampling can be found in Part IV.
- 20. It is recommended that the following **bold italic** language be added to this sentence since this section states that the dust will be sampled for total PCBs: "Any material suspected **of being** hazardous waste or **another** RCRA-regulated **or TSCA-regulated** waste will be tested and evaluated based on its composition."
- 21. It is recommended that the first sentence of the second to last paragraph on page 7 be re-written to read: "All potentially hazardous waste will be managed as hazardous waste unless analytical results prove otherwise."
- 22. Please confirm if "NELAC" is the appropriate acronym to use with regard to labs accredited in NYS or if it is "ELAP (Environmental Laboratory Approval Program)."

Section 4.1

- 23. The grab samples for dust should be representative of both porous and non-porous building materials per floor. Please clarify how Airtek plans to achieve this (e.g., certain number of grabs per porous material, per non-porous material).
- 24. It is recommended that the following language, "a minimum of," be added before "five grab samples."

- 25. Please clarify the approach to be taken if a sufficient quantity of dust per floor per composite sample cannot be collected (e.g., establish an order of precedence for analyzing for RCRA characteristics).
- 26. It is recommended that the following **bold italic** language be added to this sentence since this section states that the dust will be sampled for total PCBs: "Where analyses indicate that the dust exceeds RCRA criteria for any one RCRA characteristic **or applicable PCB concentration**, materials potentially impacted by the dust will be assumed to exceed that specific RCRA characteristic **or PCB concentration** unless testing proves otherwise **and will be handled and disposed of according to their waste characterization results**.
- 27. The end of this section states the following: "Details of the representative composite sampling to be conducted in response to the results of the dust characterization will be the subject of a revised WSMP to be submitted upon completion of the dust characterization study." Specific details on the representative composite sampling for all porous and non-porous materials should be submitted with the next revised draft version of Part IV. If it needs to be revised at a later date, the owner may submit an amendment to the plan discussing the reasons for the revisions for the regulators to review.
- 28. Please clarify if waste classification of the roof will be occurring.

Section 4.2

- 29. Sections 4.1 and 5.0 imply that sampling for total PCBs would be conducted for waste streams. However, Section 4.2 only discusses characterizing the waste stream based on the RCRA parameters. Please clarify.
- 30. This section states the following, "A minimum of three grab samples will be collected at random from 10% of the packages (bags/drums) of this class of material. Grab samples from every five packages sampled will be composited for analysis." Please clarify the connection between these two sentences since there seems to be a disconnect between being able to composite samples from every five packages/class of material and randomly grabbing the samples from 10% of the packages.

Section 4.3

31. It is recommended that the following **bold italic** language be added to the following sentences since this section states that the dust will be sampled for total PCBs: "Where analyses indicate that the dust exceeds RCRA criteria for any one RCRA characteristic **or applicable PCB concentration**, deconstruction waste materials potentially impacted by the dust, as determined by the Environmental Consultant will be assumed to exceed that specific RCRA characteristic **or PCB concentration** unless testing proves otherwise **and will be handled and disposed of according to their waste characterization results**.

Within any floor of the building where dust exhibits RCRA-regulated *or TSCA-regulated* levels of contamination, representative composite sampling of deconstruction waste will

be conducted. Analyses will be for only the specific RCRA characteristic *or PCB* characteristic that was noted in the dust characterization study."

32. More specific details should be provided on the representative composite sampling scheme discussed in the last paragraph and disposal options based on the results of the sampling.

Section 4.5

- 33. Prior to containerizing ballasts, the surfaces of ballasts and the light fixtures that they are removed from should be cleaned of dust and specified in Part IV.
- 34. Please clarify if representative samples from all caulking materials will be collected and analyzed. The characterization report seems to indicate that some sampling of caulking may have already occurred for the building. For instance, Part I states that stair bulkheads at the roof level have older windows that contain ACM caulk, and caulking related to elevators is mentioned in one of the plans. It is unclear if this category of caulking will be included in the sampling discussed in Section 4.5. It is recommended that Part IV be revised to incorporate the waste sampling and management approach to be taken for caulking materials (such as, but may not be limited to, the characterization/analytical method to be used, and final disposal options to be taken for caulking known and/or found to contain PCBs in excess of 50 ppm).

Section 4.6

- 35. Sections 4.1 and 5.0 imply that sampling for total PCBs would be conducted for waste streams. However, the second to last paragraph of Section 4.6 only discusses characterizing the waste stream based on the RCRA parameters. Please clarify.
- 36. Since Section 3.0 and 4.1 states that the dust will sampled for total PCBs, it is recommended that the following *bold italic* language be added to this sentence: "Materials similar in composition and WTC impact to those sampled would not be sampled for Resource Conservation and Recovery Act (RCRA) *or PCB* characteristics unless there is an independent concern that they might be hazardous waste due to the inherent composition of the component, subcomponent or waste stream.

Section 4.7

- 37. "Cleanable" should be removed from the title of this section and Section 2.7 (and the Table of Contents) since these sections discuss managing non-porous materials that are both cleaned and not cleaned.
- 38. Part IV does not provide specific details on how the non-porous waste streams will be managed, classified, stored, and disposed of, based on the two options provided in Section 4.7. Revise Part IV to include this information.

39. What approach will be taken for non-cleaned, non-porous waste items if the dust characterization was not conclusive at the original location in the building for the specific class of material in question?

Section 4.8

- 40. More specific details should be provided on the representative composite sampling scheme and disposal options based on the results of the sampling.
- 41. This section indicates that the initial characterization of the structure and façade will be based on the initial dust classification sampling. It is not clear from Part IV that the initial dust classification sampling will encompass structure and façade materials. Please clarify in Part IV.
- 42. It is recommended that the following **bold italic** language be added to the following sentences since the dust characterization sampling specified in Sections 3.0 and 4.1 discusses sampling for total PCBs: "Where analyses indicate that the dust exceeds RCRA criteria for any one RCRA characteristic **or applicable PCB concentration**, structure and facade waste materials potentially impacted by the dust will be assumed to exceed that specific RCRA characteristic **or PCB concentration** unless testing proves otherwise.

Within any floor of the building where dust exhibits RCRA-regulated *or TSCA-regulated* levels of contamination, representative composite sampling of structure and façade waste will be conducted. Analyses will be for only the specific RCRA characteristic *or TSCA characteristic* that was noted in the dust characterization study."

Section 5.3

43. It is recommended that the following language be added to the end of the corrosivity section: "National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized in SW-846 shall be utilized to evaluate corrosion rate if the suspected corrosive hazardous waste is a liquid."

Section 5.5

44. It is recommended that the following *bold italic* language be added to the beginning of the following sentence at the end of page 12: "The results of RCRA *and PCB* characteristic analyses..."

Section 6.0

45. Please clarify where asbestos waste will be stored in Figure WS-1 of Attachment C (Waste Storage Areas).

- 46. Please clarify what "Phase I Waste Holding Area" pertains to in Figure WS-1 of Attachment C since the plan only discusses two phases: remediation and deconstruction.
- 47. Please identify the loading area/dock(s) on Figure WS-1 of Attachment C where waste will be transported off-site.
- 48. Please ensure that floor drains proximate to, as well as within, the waste storage/staging areas will be sealed and isolated and note this fact in this section.
- 49. Section 6.0 (Waste Packaging and Storage) should include a subsection which discusses the storage requirements for wash-down water/liquids.
- 50. This section should describe the final disposal options for those material categories in Section 2.0 that are not deemed an asbestos waste, hazardous waste, universal waste, or PCB waste in Section 6.0 (e.g., C&D waste, recycled, etc.)

Section 6.2

51. This section states that PPE and remediation process consumables will be stored as ACM waste at a minimum while awaiting the results of hazardous waste characterization sampling. Section 6.1 states that the storage of asbestos waste will not exceed 50 cubic yards. Are there any concerns about exceeding the 50 cubic yards storage limit for asbestos waste while the PPE and remediation process consumables is stored on-site awaiting the sampling results for the hazardous waste characterization from the lab(s)?

Sections 4.6 and 6.6.1

52. Please provide a schedule for completing the hazardous waste determination of miscellaneous items and overall generator status determination (i.e., based on generation rate).

Section 6.6.1

53. This section should indicate where containerized chemicals/products that are not deemed hazardous waste will be stored within the waste storage areas and the final disposal option(s) for this waste stream.

Section 6.6.2

54. Please include a discussion of potential management of spent fuels as hazardous waste (i.e., if disposed rather than recycled).

Section 6.6.4

55. This section states that equipment that contains refrigerant will be HEPA vacuumed and wet-wiped before being staged in a clearly demarcated on-site area until the refrigerant has been removed by a licensed refrigerant removal service. Please clarify

where such equipment will be stored while it awaits a licensed refrigerant removal service to remove the refrigerant and where it will be stored awaiting final disposal offsite. In addition, it is recommended that Attachment C (Waste Storage Areas) be revised to note the areas where this equipment will be staged and/or stored.

Section 8.0

- 56. Please clarify the two arrows facing to the south on Greenwich St. & West Broadway on the travel route figure in Attachment B since Section 6.0 states that the storage areas will be at the southeast corner of the first floor of the building.
- 57. If the final travel routes change from those currently proposed in Attachment B (Waste Routes) after your discussions with NYCDOT and LMCCC, please revise Attachment B as promptly as possible.

Section 9.0

- 58. One of the potential facilities noted in this section is, "Lead: Recyclable." Please clarify what this means?
- 59. This section states that tanks will be disposed at Republic. Please clarify since Part IV does not indicate that tanks will be used for this project.

Section 10.0

60. It is recommended that the following language be added after the first paragraph of this section: "In New York State, PCB waste (greater than 50 parts per million PCB) is also New York State hazardous waste. Therefore, the documentation specified for hazardous waste will also apply to PCB waste. In addition, for each facility that uses/stores at any one time 45 kilograms of PCBs in containers or one or more PCB transformers or 50 or more large high- or low-voltage capacitors must develop and maintain an annual document log. If PCB transformers are present at the Building, weekly inspections must be performed and inspection logs created/maintained. Certificates of disposal must be obtained for all PCB wastes disposed and large-volume PCB waste generators must also develop and maintain an annual document log."

OSHA Comments on Regulatory Submittal Part I Work Plan and Regulatory Submittal Part III Health & Safety Plan

General Comments:

- 1. In general, OSHA does not review contractor plans outside the scope of an inspection or formal partnership agreement. Due to the high profile nature of certain projects surrounding the WTC site, OSHA has provided these comments to EPA as technical assistance in the preparatory phase of the project. Employers are not required to submit plans to us, nor does OSHA's review constitute acceptance or endorsement. Whether DASNY/CUNY chooses to make changes or not, their actual plan in place during any inspection is what will determine whether or not they are in compliance.
- 2. The HASP is written to address asbestos abatement and/or HAZWOPER. It is extremely light and lacking in regards to demolition activities. Part I states that the HASP is a "site-specific Preliminary HASP," however it is not very site-specific and it has too many placeholders (or references) to be able to fully evaluate the worker safety & health protection within the document.

Regulatory Submittal Part I – Work Plan:

Section 7.3 Scaffolding

3. Part I is very limited in terms of implementing worker safety & health protection. For example, the section on scaffolding (Section 7.3) discusses what might be needed, but not how to install it. More than half of the section addresses the ACM Spandrel and the NYS DOL Variance. It appears the consultant focused only on the asbestos/COPCs aspects of the project.

Section 7.5 Demolition Sequence

- 4. This section which discusses material being "pushed down abandoned shafts and dropped to the cellar level" appears to contradict with Section 7.2 which states a "limitation on free-fall of demolition debris."
- 5. In addition, how will employees be protected from falling into these "abandoned shafts," and how will employees below be protected from being struck by falling objects? Please clarify.

Regulatory Submittal Part III – HASP:

Emergency Plan

- 6. The Emergency Plan appears to deal with dust minimization, not emergency procedures. It is unclear how the following two bullet items noted for protecting workers potentially exposed to building contaminants are useful protective measures: (1) "A. 2. Avoid ingesting dust"; and, (2) "A. 3. Avoid inhaling dust". Similarly "B.1. limit activities that promote transport of dust" is vague and unhelpful. Please clarify and explain how they relate to an "emergency plan".
- 7. Under the title, "Minimize Potential Public Contact" the first bullet item states, "limit access using barricades, temporary fencing, and "jersey barriers". Is Airtek proposing to place or move emergency barriers during the scope of a building evacuation since this is under the emergency plan? The scope for a complete building evacuation is listed as a "note" on the bottom of the page. It implies that a building evacuation will occur in the case of a structural collapse. It appears that such a scenario is not the time to worry about jersey barriers. Please clarify. It also states that a building evacuation would occur for "certain power failures" which is subjective without defining the criteria. Please clarify.
- 8. The designated assembly area is vague and should be given by cross-street, not "north of the new subway entrance".
- 9. For reporting emergencies, it states that "all site personnel...shall immediately call 911". Airtek may wish to re-word this section since it implies that all personnel on site would be attempting to contact 911.
- 10. Do not believe the section titled, "D. Disposal," is an emergency response activity.

Section 4.2.1 Heat Stress

11. 77 degrees is listed as the "best" temperature for rest areas. How will this be established and monitored? How was this temperature established as the "best" temperature? Please clarify.

Section 4.2.2 Cold Stress

12. The first aid for frostbite seems out of place. Why was it listed while all other injuries were not? The treatment listed includes warming for 30 minutes, but also getting "immediate medical care". EMS should be summoned via 911, and will certainly be onsite in less than 30 minutes; otherwise the patient can be transported to the hospital identified in the HASP as being less than a mile away.

Section 4.2.3 Electrical Hazards

13. Please clarify if there are any overhead power lines in the vicinity of the building. What about the building utilities? They are a far more likely source of electrical hazards during deconstruction than downed overhead power lines and electrical wires. Please clarify.

Section 4.2.5 Overt Chemical Exposure

14. Why does Airtek believe this category of exposure warrants first aid instructions? This section is supposed to address physical hazards while chemical hazards were addressed in Section 4.1. Please clarify.

Section 4.3.2 Emergency Medical Treatment

- 15. Why is this section separate from Section 16.4 (Medical Emergency)? No where in this paragraph were 911 mentioned.
- 16. If individuals are designated to provide first aid/CPR, this may trigger the need for the employer to establish an Exposure Control Plan (ECP) if this is part of their duties (as opposed to acting as a Good Samaritan).
- 17. Note that there are some exceptions in the OSHA regulations, which might permit Hep B vaccination post incident, but the program needs to be established up front. This is touched on in Section 16.4.3, but still not enough to be an actual plan. For example, it states that "personnel shall use procedures and PPE that minimize the potential for exposure". The ECP needs to address those specifically.

Section 5.5 Safe Work Permit

- 18. The text in Section 5.5 does not match the header of "Safe Work Permit" since it only addresses training and recognition of these "special work conditions", not the need, format, or procedure for a permit.
- 19. Section 5.5 of the HASP is also the only mention of confined spaces which could be an issue in cleaning duct work or other areas, as well as deconstruction of certain building components (especially mechanical systems). This should be addressed specifically.

Section 6.5 Site Security

20. Please clarify why site security (Section 6.5) is under Section 6.0 (Communications). The control measures include safety items.

Section 8.0 Engineering and Administrative Controls

21. The HASP is very lacking on addressing safety items pertaining to the demolition of a multi-story building. For example, Section 8.0 mentions only one item pertaining to the non-abatement type activities being conducted at the building, "Barricades, railings, or other devices to prevent employee exposure to fall hazards or moving equipment (29 CFR 1926)."

Section 9.0 Personal Protective Equipment

22. The need for Level B protection for jack hammering of concrete is probably over protective. This is not a unique task, and exposures that far above the PEL as to exceed the protection factor of a PAPR are unlikely.

Section 11.2 Operational Precautions

- 23. Please define what is meant by "extremely hazardous entries." What criteria will be used?
- 24. Which "off-site personnel" will provide emergency assistance? Does this mean Emergency Services? Does it mean a contractor not on site? Does it mean off-duty employees will be recalled? Please clarify.
- 25. This section accurately states that "warning signals for site evacuation must be established". What are they? This HASP is the vehicle to describe them.
- 26. "Frequent and regular inspections" are required under the standard. The HASP should define how the employer will comply with the standard, not just repeat the requirement and say it will be met. Anything less than once a day on a demolition site would probably be deficient.

Section 13.0 Fire Control Equipment

- 27. What is "an adequate number of ... fire extinguishers". How about listing the size (i.e., 10-pound ABC, etc.) and distribution (i.e., every 75')? Again, the HASP is supposed to define the contractor's site specific plans for compliance.
- 28. This section states, "All Site personnel shall be trained in the use of the extinguishers." This conflicts with the fire & explosion instructions in Section 16.1 which states that the building will be evacuated. This needs to be clarified and the discrepancy resolved. Section 13.0 states that "extinguishers shall only be used on outbreak stage fires". The correct term is "incipient stage", and does this mean that they will delay evacuation until the fire is no longer incipient? Please clarify.

Section 14.1 Container Labels

29. The first and third bullet points are duplicated. This section is supposed to be a page and a half of text describing hazard communication, although it's still not a hazard communication program. Develop a compliant hazard communication program.

Section 15.0 Electrical Lockout/Tagout

30. What about mechanical and other forms of residual energy? Building elevators, mechanical systems, pipes, and more can all result in the unexpected release of energy. This section states that "Specific procedures and permitting requirements will be specified in the HASP..." Since this is the HASP it should be in this HASP.

Section 16.1 Fire or Explosion

31. For the building evacuation (already addressed above), how about a head count for employee accountability? Also, need to address the use of the fire extinguishers which will be provided per Section 13.0. What is the employer's policy regarding their use — may any employee use them, only designated employees, or no one? If everyone may use one, since Section 13.0 states that all site personnel will be trained, where is that in the four steps listed in Section 16.1? Please clarify.

Section 16.2 Power Failure

32. Still does not list the circumstances when the building will be evacuated per the "note" in the emergency plan which states that certain power failures will require a complete building evacuation.

Section 16.3 Structural Failure

33. This section emphasizes the steps to be taken with regards to the containment areas but at the exclusion of any safety component. This plan states that in the event of an "unanticipated structural failure" that after calling 911 ("if warranted"), the contractors will focus on containment isolation activities and maintaining the isolation barriers. What about evacuation, personnel accountability, engineering assessment, and shoring up the structure?



February 17, 2006

Pat Evangelista US EPA 290 Broadway New York, NY

Re: Comments on Asbestos/WTC Dust Portion of

Airtek Preliminary Façade & Environmental Characterization Reports

& Regulatory Submittal – Part I Work Plan

Fiterman Hall Building 30 West Broadway New York, NY

Dear Pat,

The Department has reviewed the January 10, 2006 Airtek Façade & Environmental Characterization Reports, as well as the Part I Work Plan document, as they all relate to asbestos material (ACM) and WTC dust/residue identification, assessment and removal/cleanup procedures. Several significant items within the reports and work plan must still be revised for consistency with the report data, and to address other Departmental concerns.

The Department has discussed concerns regarding the reports with the NYC DEP, and the Department provides the following general and specific comments on the reports and work plan, to be included with your comments on the entirety of the referenced reports.

General Comments

- Neither of the reports or the work plan included floor plans that identified areas severely damaged by the collapse of building 7. For the reports, these floor plans shall also identify locations of remaining ACM within the building.
- Tables, figures and plan drawings included within the reports and work plan were illegible due to sizing. Please include revised tables, figures and plan drawings with legible information.
- Information regarding cleaning of the "gash area" needs to be expanded upon. For example,
 - O What is the extent of the gash area?
 - O Was the entire gash area cleaned and cleared when bulk debris was previously removed?

Phone: (518) 457-1536 Fax: (518) 457-1301 W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240



- o Is the gash area now enclosed with temporary barriers to allow for removals and cleaning still necessary? If not, what portion of gash area is enclosed?
- O What is the scope of work and procedures specified to address asbestos project removals, cleanup and required visual inspections within the gash area? Limited information is provided within section 6.3.1 of the work plan, but full details of existing conditions and site-specific procedures to be followed for temporary hardwall barrier and containment construction at the gash area must be included.
- The Department adopted amended Industrial Code Rule 56 (ICR 56) on January 11, 2006. Please modify all references to ICR 56 within subsequent revised reports and work plans to be consistent with current requirements.
- Within the work plan, no detailed procedures were included for the majority of the asbestos project tasks. Instead, references were included which indicated that once selected, the asbestos abatement contractor would determine actual asbestos project procedures within site-specific variance decisions yet to be obtained. This approach is not advisable, as all specifics regarding implementation of the asbestos project should be established by the asbestos project designer prior to the bidding of the project; so all bidders know what will be required to complete the asbestos project.

The role of the project designer is to "plan the scope, timing, phasing sand remediation methods to be utilized on any asbestos project". For an asbestos project that includes asbestos contamination cleanup, and specifically WTC dust/residue cleanup, establishment of the required asbestos project procedures within the work plan is essential, to reduce potential asbestos project procedural problems throughout the course of the asbestos project. If procedures must be specified that aren't consistent with ICR 56 requirements, a site-specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site-specific variance decision must be incorporated into the work plan specified asbestos project procedures.

All asbestos project design submittals, including variance petitions, must be submitted to
DASNY internal asbestos project design personnel for appropriate review and approval,
prior to submission to the Department. The Department will not review any site-specific
variance petition, or revised work plan asbestos project procedures, without DASNY's prior
approval of the submission.

Specific Comments

PRELIMINARY FACADE CHARACTERIZATION REPORT

3.4 ASBESTOS-CONTAINING MATERIAL(ACM) INSPECTION AND TESTING

"Figure F-1 Section View for flashing location" was referenced within this section, but not apparent within the report. Also, ACM interior vapor barrier and ACM lintel flashing located below the windows between brick fascia and façade structural components were

Phone: (518) 457-1536 Fax: (518) 457-1301

W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240



both referenced within this section, but no obvious correlation was apparent with the ACMs identified within Report Attachment B.

4.3 FACADE INTEGRITY

Were operable window hidden surfaces investigated? Do these surfaces still contain WTC dust/residue, which must be cleaned prior to sealing of the windows as critical barriers? Please provide additional information regarding these potentially contaminated surfaces.

• 4.4 ASBESTOS-CONTAINING MATERIALS

The only materials referenced within this section are interior vapor barrier and non-friable lintel flashing. Is the lintel flashing included within this section the same as the ACM spandrel flashing mastic and beam flashing mastic at the loading dock entrance identified within the asbestos summary table later in the report? Please correlate these materials appropriately with bulk sample analysis data. Also, no information is apparent within this section regarding the ACM window caulking at the stair and elevator mechanical room roofs, the ACM roof membrane on the 14th floor roof, or the ACM window frame caulking at the first floor exterior of the building. All of these materials were identified within Report Attachment B, Table 1 "Summary of Building Envelope Inspection Results for Asbestos".

PRELIMINARY ENVIRONMENTAL CHARACTERIZATION REPORT

• 1.0 EXECUTIVE SUMMARY

ACM spandrel flashing removal during deconstruction was referenced, but no other exterior ACM identified within the Facade Report was discussed within the summary.

5.4 ASBESTROS CONTAINING MATERIALS SURVEY

Is the vapor barrier on interior surface of façade block referenced within this section the same as the ACM tar, paper, and fiberglass/felt materials (1st through 15th floor) on the perimeter walls identified within the asbestos summary table later in the report? Please correlate these materials appropriately with bulk sample analysis data. Also, no information is apparent within this section regarding the ACM window caulking at the elevator mechanical room roofs, the ACM roof membrane on the 14th floor roof, or the ACM window frame caulking at the first floor exterior of the building. All of these materials were identified within Report Attachment IV, Table 1 "Summary of Inspection Results for Asbestos". In addition, the results summary indicates that floor covering materials were assumed to be ACM, but nothing is included regarding the floor covering adhesives/mastics. These materials should also be assumed and treated as ACM, unless appropriate bulk sampling and analyses adequately show the materials to be non-ACM.

Phone: (518) 457-1536 Fax: (518) 457-1301 W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240



REGULATORY SUBMITTAL PART I - WORK PLAN

• 4.5 ELEVATOR SERVICE

This section indicates that the elevator shafts will be vented to the top floor, which will be placed under negative pressure to filter and control the vented air. However, the reopening request detail drawings don't agree with this proposed method. All asbestos project work plan procedures shall correspond with all conditions and procedures within existing site-specific variance decisions, decision amendments and decision reopenings for the project.

6.1 OPERATION I – CLEAN ZONE DECONTAMINATION& CLEARANCE

This section indicates that three zones on the first floor will be sealed off, gut-stripped, decontaminated, and then clearance achieved. However, no details regarding specified procedures (i.e. decontamination system enclosures construction, placement and utilization requirements, work area preparation requirements, removal/handling and cleaning procedures, etc.) to complete these tasks were apparent.

• 6.2 OPERATION II – EXTERIOR CLEANING

No specific scope of work, or details regarding specified procedures (i.e. decontamination system enclosures construction, placement and utilization requirements, work area preparation requirements, wastewater collection methods, removal/handling methods, cleaning and clearance procedures, etc.) to complete these tasks were apparent.

• 6.3 OPERATION III – GUT STRIP

o 6.3.1 Building Envelope Preparation Work

It is unclear how operable window hidden surfaces that may still contain WTC dust, will be cleaned prior to sealing of the windows as critical barriers. Also, the façade cleaning procedures during erection of the scaffolding must be thoroughly defined within the work plan. Also, the specific details regarding barrier installation and establishment of containment at the gash area must also be addressed.

o 6.3.2 Establishment of Negative Air Pressure

This section refers to a site-specific variance "to be solicited" for alternate procedures. All asbestos project work plan procedures shall correspond with all conditions and procedures within existing site-specific variance decisions, decision amendments and decision reopenings for the project.

o 6.3.3 Material Shredder

More information must be included regarding any proposed shredding operations. For instance, adequate manufacturer information on whatever unit is proposed must be provided, as well as information regarding isolation barriers for the shredding operations within the work area, and all appropriate engineering controls to be

Phone: (518) 457-1536 Fax: (518) 457-1301

W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240



utilized during the shredding and bagging/containerization of the shredded waste stream. In addition, no ACM removed shall be shredded.

o 6.3.4 Work Areas

This section indicates that the entire structure will be one work area. This approach may be problematic, as the entire work area will be abated, then cleaned then cleared. One floor couldn't be under removal, while another floor was in the cleaning stage or clearance stage, unless work area segregation occurs per floor or group of floors. The single work area approach should be revisited before the work plan is finalized.

o 6.3.5 Removals

This section includes procedures not in compliance with the current ICR 56. As previously indicated, if procedures must be specified that aren't consistent with ICR 56 requirements, a site-specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site-specific variance decision must be incorporated into the work plan specified asbestos project procedures.

• 6.4 OPERATION IV – IN PLACE ACM

No information is apparent within this section regarding the ACM window caulking at the elevator mechanical room roofs, or the ACM window frame caulking at the first floor exterior of the building. These materials were identified within Report Attachment IV, Table 1 "Summary of Inspection Results for Asbestos". In addition, ACM floor covering materials are included, but nothing is included regarding the floor covering adhesives/mastics. These materials should also be assumed and treated as ACM, unless appropriate bulk sampling and analyses adequately show the materials to be non-ACM.

Regardless of the listed ACMs, as previously indicated if procedures must be specified that aren't consistent with ICR 56 requirements, a site-specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site-specific variance decision must be incorporated into the work plan specified asbestos project procedures.

7.3 SCAFFOLDING

A "Deconstruction and Scaffold Layout Plan" was referenced within this section, but not apparent within the documents". The document detailing all appropriate procedures for this work must be included with the work plan.

Phone: (518) 457-1536 Fax: (518) 457-1301 W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240



• 7.5 DEMOLITION SEQUENCE

No information was apparent in this section regarding sequencing of removals, cleaning and clearance at the contaminated elevator shafts or other remaining contaminated utility areas, prior to commencement of the general deconstruction of the building.

• 7.6 WASTE MANAGEMENT – CONVENTIONAL DEMOLITION

The only information regarding exterior ACM removals included a generalized statement that the non-friable asbestos spandrel flashing would be removed during "conventional demolition". No information was apparent in this section regarding specific asbestos project details for all the exterior ACM removals, which must be completed prior to commencement of the general deconstruction of the building.

The Department anticipates that these issues will be appropriately addressed within revised versions of these documents. If you have any questions regarding these comments please contact our office at (518) 457-1536.

Sincerely,

Christopher G. Alonge, P.E.

Senior Safety and Health Engineer

ec Krish Radhakrishnan, P.E. - NYC DEP

Gil Gillen – USDOL/OSHA

Robert Iulo - NYC DOB

Richard Fram - NYS DEC

Norma Aird – NYS DOL

05-0919